



Hazardous Materials

Introduction

Hazardous materials are chemicals or substances which can be harmful to human health and the environment. Usually they are transported or used in complete safety. Occasionally, however, there are accidents. Many of these chemicals are found in small amounts in every home. People have come to trust these materials, and may not realize that they are potential killers.

“Many of these chemicals are found in small amounts in every home.”

Household Substances that Pose Risks

All of these substances could be dangerous, although some (such as baking soda) would have to be mixed with others (ammonia, for example) to cause a health risk.

- Household ammonia
- Chlorine (swimming pool)
- Baking soda
- Lighter fluid
- Weed killer
- Gasoline
- Motor Oil
- Paint
- Fertilizer
- Drain opener
- Bug spray
- Nail polish remover
- Cleaning rags
- LP gas (stove and grill)
- Muriatic acid (swimming pool)

The following materials have immediate risks:

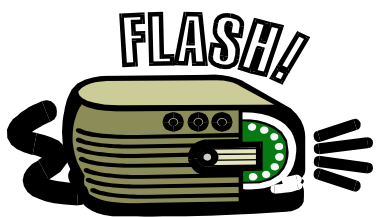
- Ammonia—in closed spaces, fumes can be a problem; very reactive with some other substances
- Pool chlorine—fumes, corrosive
- Lighter fluid—highly flammable
- Weed killer—toxic by ingestion or absorption through skin
- Gasoline—flammable, explosive; ignitable fumes travel
- Motor oil—combustible
- Cleaning rags—may contain combustible or flammable liquids
- LP gas—highly flammable to explosive
- Drain openers—highly toxic, caustic, corrosive
- Bug spray—toxic by inhalation or absorption

This document is IFAS publication DH 1109.

Adapted by UF/IFAS from:
Document DH-028,
IFAS Disaster Handbook for
Extension Agents
(developed by the
Cooperative Extension
Service for the benefit of
Florida's citizens)

- Nail polish remover—flammable
- Paint—flammable
- Fertilizer—toxic, possibly flammable
- Muriatic acid—corrosive, inhalation hazard

Read all directions carefully and follow them. Store substances safely, away from children. Pay attention to first aid directions. Don't mix chemicals. Keep the number of your local poison control center handy.



“Should a potentially threatening release occur, safety agencies will inform the public through the media.”

Hazardous Material Spills/Releases

Significant releases of hazardous materials are rare, but can happen. Storage and manufacturing facilities, utility plants, commercial businesses and farms may all use materials that are very dangerous if released.

Should a potentially threatening release occur, safety agencies will inform the public through the media. Follow instructions carefully. There may be little time to react. Some materials are so deadly that a single exposure to a few drops or a single breath of fumes is fatal. Don't take chances. If instructed to evacuate, do so quickly and follow instructions of public safety officials. If directed to stay inside, close all windows and doors and turn off air conditioners; if necessary, seal around doors and windows with towels or blankets. Do not go outside or open doors or windows until told it is safe to do so.

Radioactive Materials

It is possible that a transportation accident could be a radioactive health risk, but the chances are very small. Some low-level radioactive waste products used in medical facilities are routinely carried over highways all over the world. Hazardous materials are heavily overpacked, and quantities are carefully limited. All are to be clearly marked RADIOACTIVE with black markings on a yellow or white background. Move away from any such package released in an accident, and be sure emergency responders know of its presence. Do not attempt to move it. Leave recovery of the package to the experts.